

it is in courses of study. Rather it is in courses of study because children need it in their daily living. The young child has a feel for the quantitative side of things as long as the abstract is not too hurriedly forced on him. By school age many of his activities are anemic and vague without computation or measurement. So arithmetic is used continually in the good school. The crackers are counted for lunch or the children for the game. The wood is measured for the wagon or the flour for the cookies. The accounts are kept for the ticket sale or for the supplies purchased. And so on!

Time is always saved by teaching an idea or a process at the time it is needed. When a child thus uses arithmetic intelligently and accurately, conditions most favorable to learning are set up. Under such circumstances a child often comes to understand a process without any teaching save that done in connection with real situations. Moreover, if the real situations occur often enough and the process is a simple one, even skill sometimes results without further teaching.

But all processes are not so simple, long division for instance. And, don't whisper it even, but some teachers lack the vision to see sufficient places where arithmetic is needed. So to insure understanding, supplementary experiences must often be arranged, work with objects or with stories involving number situations. And in the same way, in order to insure skill, extra practice must be provided.

So now by a backing-in process I have come to the columns on the abilities charts in Section IV. When the committee felt that the idea or process could be taught successfully in connection with real situations, they put a check in the column headed "Instruction within the Unit Probably Adequate." In the same way when they felt that supplementary experiences and practice would usually be necessary, they put a check in the column headed "Instruc-

tion in Addition to that in Unit Probably Required."

Now by way of good measure, there are two points about these charts you should get very clearly in mind. First, the headings in both columns include the word *instruction*. Real situations give meaning and motive, thereby shortening the learning process. But no child should be asked to acquire control of such a systematic tool as arithmetic without direct teaching. Life is too short and the confusion coming from gaps in his learning is too tragic. In the second place, the heading *Teaching Emphasis* means just that. The blocking in under this heading indicates stress in teaching in an average situation and not *Minimum Essentials* for any grade or any child. Children grow at different rates, so provisions for individual differences must be made. This is particularly true in arithmetic because of its systematic nature. So teach that big overgrown boy who can't add how to do it (if you can) regardless of the fact that long division is blocked in heavily for your grade.

THE READING TABLE

THE NEW CULTURE. By A. Gordon Melvin. New York: Reynal & Hitchcock. 1937. 296 pp. \$2.90.

Sub-titled *An Organic Philosophy of Education*, Dr. Melvin's latest book departs from the typical text in this field and has developed in vital, compelling language such new themes as relativity, the nature of energy, the relation of spirit and matter, personality, and the work of the community. While the point of view throughout stresses the organic principle, the text and its organization often depart from this in the transitions from theme to theme.

One sound principle on which the author has tried to build is that educational philosophy must be thoroughly grounded in general philosophy. Three rather practical chapters comprising two-thirds of the book deal with elementary, secondary, and col-

lege education. One of the most valuable features of the book is a four-page bibliography of materials with which teachers and students of education are too often unacquainted and with which they should familiarize themselves.

The book is a splendid book mechanically. As to content, the student will find as with so many books on education much material that is relatively vital and easy to comprehend, and much that is technical, difficult, and apparently unrelated to the book as a whole.—W. J. G.

MATHEMATICS IN LIFE. By Raleigh Schorling and John R. Clark. Yonkers-on-Hudson, N. Y.: World Book Co. 1937. 437 pp. \$1.40.

The writer has long been aware of the fact that high school graduates are frequently sadly lacking in arithmetical ability and mathematical comprehension. This book is an attempt to rectify this condition. It is divided into eight units, as follows: measurement, constructions, drawing to scale, per cents, uses of graphs, wise use of money, home and business arithmetic, and formulas and equations. These provide a general review of all elements useful to the pupil who is not preparing for college, and at the same time essential to the pupil who expects to pursue his studies further.

The book recognizes at the start that a number of pupils who reach the high school cannot *read*, and that these pupils must be taught to read. Ability in reading, as well as a knowledge of mathematics, is tested by numerous review questions and tests.

The book gives in many instances a history of the development of the processes used and contains many pictorial representations of these processes. Only a careful examination can show the individual teacher whether it is exactly what is needed to fill for a particular class, but there are many valuable suggestions for teachers in the junior and senior high school, and it should be valuable as a reference book for prospective teachers.—HENRY A. CONVERSE.

METHODS IN PHYSICAL EDUCATION. Second edition. By Jesse Feiring Williams. John I. Dam-bach and Norma Schwendener. Philadelphia: W. B. Saunders Company, 1937. 277 pp. \$2.50.

This is a revision of a valuable book with additional material and much reorganization of the old. The book, according to the authors, "introduces the student into the fascinating aspects of the problem of method and develops the relationships that exist with general educational purpose and method."

Chapters on organization, management, and efficiency in class instruction will be found quite helpful. Chapters on methods in the teaching of particular types of activities such as dancing, swimming, athletics, etc., have been revised, and a new chapter on the teaching of games is added.

REMEDIAL READING. By Marion Monroe and Bertie Backus. Boston: Houghton Mifflin Company. 1937. Pp. 171. \$1.40.

This book summarizes the work in remedial reading done in connection with the *Washington Experiment in Character Education*. It is so clear that the teacher untrained in remedial reading can use it. Yet it is so practical that experienced workers in the field will profit by reading it. In other words this is one of the important 1937 books in elementary education.

K. M. A.

THE FEAR OF FREE DISCUSSION

I call to your attention as one dangerous tendency indicating a growing distrust of democratic processes the fear on the part of many people of free public discussion and the exercise of academic freedom. This expresses itself in the attempt directly and indirectly to institute censorship over the expression of ideas.—DR. JOHN W. STUDEBAKER.

You are surrounded by hundreds of people more timid than you.—FRED B. BARTON, in *Let Yourself Go*.

In order to arrive quickly go slowly.